

PATENT

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In Re Patent Application of:

First Named Inventor: Garrett, Jr., Billy

Application No.: 09/837,307

Filed: 4/17/2001

Title: MECHANISM FOR ENABLING FULL DATA BUS

UTILIZATION WITHOUT INCREASING DATA

GRANULARITY

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Examiner: Dinh, Ngoc V.

Art Unit: 2187

Technology Center 2100

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22313-1450 on July 25 2005

Kyle S. Okada

(Name of Person Mailing Correspondence)

Signature

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Sir:

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This Information Disclosure Statement is being submitted pursuant to 37 CFR 1.97(b). No fee is believed to be due.

Pursuant to 37 CFR 1.97(h), the submission of this Information Disclosure Statement is not to be construed as an admission that the information cited in this statement is material to patentability.

The Commissioner is hereby authorized to charge any fees which may be required in connection with this submission to Deposit Account No. 501914.

Respectfully submitted,

SHEMWELL GREGORY & COURTNEY LLP

Date July 25 2008

Charles E. Shemwell, Reg. No. 40,171

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Atty. Docket No.	RBS2.P031

			U.S. Patent Documents	-		
Examiner Initials*	US Patent Docum		Name of Patentee or Applicant of Cited Document	Date of Publication	Relevant Pages, Columns, Lines	
mitials	Number 2001/0037428	Kind A1	Hsu et al.	Nov., 2001		
	2003/0052885	A1	Hampel et al.	Mar., 2003		
			·		DECE	/ ED
	20040019756	A1	Perego et al.	1/29/2004	RECEI	
	4670745		O'Malley et al.	Jun., 1987	AUG n 1	2005
	4766538		Miyoshi	8/23/1988	7	-t 04 0
	4768157		Chauvel et al.	Aug., 1988	Technology Ce	nter 210
	4837465		Rubinstein	Jun., 1989		
	4985867		Ishii et al.	1/15/1991		
	5146592		Pfeiffer et al.	Sep., 1992		
	5394528		Kobayashi et al.	2/28/1995		
	5530814		Wong et al.	6/25/1996		
	5546346		Agata et al.	Aug., 1996		
	5559970		Sharma	9/24/1996		
	5614855		Lee et al.	3/25/1997		
	5652870		Yamasaki et al.	7/29/1997		
	5655113		Leung et al.	8/5/1997		
	5717871		Hsieh et al.	2/10/1998		
	5717901		Sung et al.	2/10/1998		
	5748561		Hotta	May., 1998		
·	5751657		Hotta	May., 1998		
	5787267		Leung et al.	7/28/1998		
	5793998		Copeland et al.	8/11/1998		
,	5801985		Roohparvar et al.	9/1/1998		
	5852725		Yen	12/22/1998		

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			U.S. Patent Documents			
Examiner Initials*	US Patent Docur	nent Kind	Name of Patentee or Applicant of Cited Document	Date of Publication	Relevant Pages, Columns, Lines	
	5893927	Killu	Hovis	4/13/1999		
	5936885	<u> </u>	Morita et al.	Aug., 1999	REC	EIVED
	5958033	<u> </u>	Schubert et al.	9/28/1999	AUG	1 2005
	6034878	<u> </u>	Osaka et al.	3/7/2000		
	6047347	<u> </u>	Hansen et al.	4/4/2000	Technology	Center 2100
	6125157	 	Donnelly et al.	9/26/2000	·	
	6138185	 	Nelson et al.	10/24/2000		
	6141273	<u> </u>	Ku et al.	10/31/2000		
	6144220	\ <u> </u>	Young	11/7/2000		ļ
	6247084		Apostol et al.	Jun., 2001		
	6311313	<u> </u>	Camporese et al.	10/30/2001		
	6366995		Vilkov et al.	Apr., 2002		
	6393543		Vilkov et al.	May., 2002		
	6625687		Halbert et al.	9/23/2003		
	6754120		Bellows et al.	Jun., 2004		
	6825841		Hampel et al.	Nov., 2004		
	RE37409		Barth et al.	Oct., 2001		

[Foreign Patent Documents					
Examiner Patent Document			Name of Patentee or Applicant	Date of	Relevant Pages,	Trans-
Initials*	Number	Kind	of Cited Document	Publication	Columns, Lines	lation
	EP0887737	B1		1/22/2003		
-	GB2367400	Α		4/3/2002		

Examiner	Date	
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	/ Non Patent Literature Documents	
Examiner Initials	Name of Author, Title of Item, Date, Page(s), Volume-Issue Number(s), Publisher, City and/or Country where Published	Trans- lation
	C. Yoo et al., "A 1.8V 700 Mb/s/pin 512Mb DDR-II SDRAM with On-Die Termination and Off- Chip Driver Calibration, IEEE International Solid-State Circuits Conference ISSCC 2003/Session 17/SRAM and DRAM/ Paper 17.7, pp. 312-313 and 496, plus Visuals Supplement on pp. 250-251 and 535	
	Fairchild Semiconductor, "Design Optimization Techniques for Double Data Rate SDRAM Modules," Jul. 2000. 6 pages.	
	IEEE 100, "The Authoritative Dictionary of IEEE Standards Terms", Seventh Edition. Critical piece first to Cross bar switch (page 252).	
	Kirihata et al., "A 390-mm2, 16-Bank, 1-Gb DDR SDRAM with Hybrid Bitline Architecture", IEEE Journal of Solid-State Circuits, Vol. 34, No. 11, November 1999; pages 1580-1588	
	Masumoto, "Configurable On-Chip RAM Incorporated Into High Speed Logic Array", Proceedings of the IEEE 1985 Custom Integratred Circuits Conference, May 20-23, 1985; pages 240-243.	
	Micron Technology, Inc., "Graphics DDR3 DRAM MT44H8M32- 2 Meg x 32 x 4 Banks," Advance Data Sheet, Copyright 2003, pp. 1-67	
	Micron Technology, Inc., "Micron Synchronous DRAM 128Mb:x32 SDRAM," pp. 1-52, Rev. 9/00.	
	Minutes of Meeting No. 70, JC-42.3 Committee on RAM Memories, March 9, 1994, Orlando, Florida, 72 pages (see, in particular, page 62).	
	NVidia Corporation, "GeForce3: Lightspeed Memory Architecture," NVIDIA Corporation Technical Brief, pp. 1-9, date unknown.	
	L	ч

Examiner	Date	
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ĺ	Non Patent Literature Documents	
Examiner Initials	Name of Author, Title of Item, Date, Page(s), Volume-Issue Number(s), Publisher, City and/or Country where Published	Trans- lation
	S. Takase and N.i Kushiyama, "WP 24.1 A 1.6GB/s DRAM with Flexible Mapping Redundancy Technique and Additional Refresh Scheme," IEEE Journal of Solid State Circuits, Vol. 34, No. 11, November 1999, pp. 1600-1606	
	S. Takase and N.i Kushiyama, "WP 24.1 A 1.6GB/s DRAM with Flexible Mapping Redundancy Technique and Additional Refresh Scheme," IEEE International Solid-State Circuits Conference, 4 pages plus ISSCC Slide Supplement pp. 348-349 and 506-507	
	Samsung Electronics, "SDRAM Device Operations," 41 pages, date unknown.	
	Satoh et al., "A 209K-Transistor ECL Gate Array with RAM", IEEE Journal of Solid-State Circuits, Vol. 24, No. 5, October 1989; pages 1275-1281.	
	Zhao et al., "An 18 Mb, 12.3 GB/s CMOS Pipeline-Burst Cache SRAM with 1.54 Gb/s/pin", IEEE International Solid-State Circuits Conference, 1999; 10 pages.	

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